

PROCEEDINGS
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STREPTOSYLLIS LATIPALPA, NEW SPECIES
(POLYCHAETA, SYLLIDAE) FROM PUGET
SOUND (WASHINGTON)¹

BY KARL BANSE

University of Washington, Seattle

Among the polychaetes collected from intertidal sand near Seattle, Washington, in 1956 to 1957 by Wieser (1959), there is a previously overlooked, well-preserved specimen of an undescribed species of *Streptosyllis* Webster and Benedict, a genus not yet reported from the Pacific Ocean. The exact locality of collection can no longer be determined. The holotype is deposited in the United States National Museum (USNM 36509).

Genus *Streptosyllis* Webster and Benedict
Streptosyllis latipalpa new species

Description. The holotype has 26 setigers and is 1.8 mm long (without cirri). The greatest width is 0.27 mm with parapodia, and 0.12 mm without. The palps, which are large for a member of this genus, are fused at the base and rounded anteriorly (Fig. 1A). The median antenna inserts in the middle, the lateral antennae insert near the anterior margin of the prostomium. Eyes cannot be distinguished. The prostomium is well separated from the prostomium and carries two pairs of tentacular cirri. These cirri, as well as the dorsal cirri of the following segments, tend to be slightly thicker distally than proximally. Usually they are irregularly pseudoannulated, although occasionally, they are truly annulated. The ventral cirri of the first four setigers are short, whereas those of the remaining setigers are slightly longer than the parapodia (Fig. 1B). The pharynx is short and straight (not everted) and apparently without a tooth, but the specimen is fairly opaque. The proventricle extends from the anterior border of the fourth setiger into

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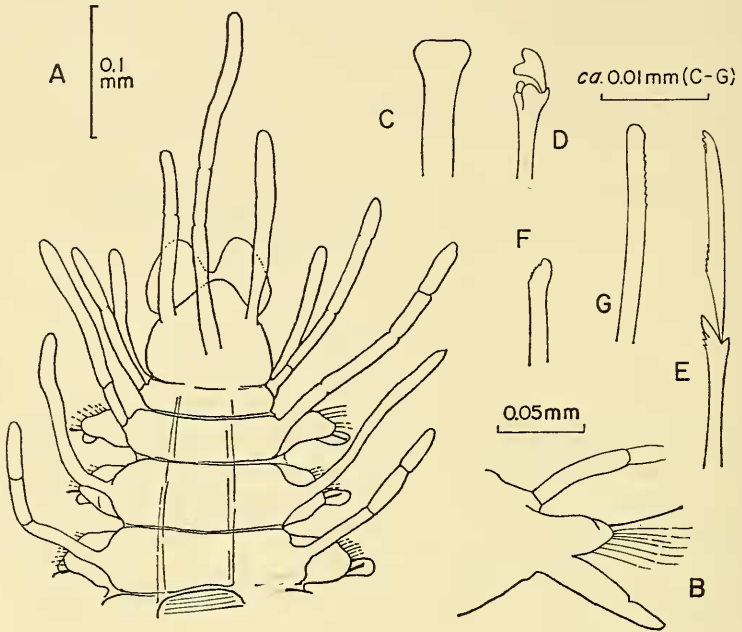


FIG. 1. *Streptosyllis latipalpa*, new species: A, Anterior end, dorsal view; setae schematic; B, twelfth parapodium; setae schematic; C, acicula from third parapodium; D, compound seta from third parapodium; E, compound seta from twelfth parapodium; F, dorsal simple seta from third parapodium; G, dorsal simple seta from twelfth parapodium.

the eighth setiger. There is only a median cirrus, about four times as long as wide, on the pygidium; long paired cirri, common to other members of the genus, may have fallen off. Heavy aciculae (Fig. 1C) occur in setigers 2 to 5. In the first four setigers there are about a dozen compound setae per parapodium. The shafts seem to end in three knobs opposite to the insertion of the very short blades (Fig. 1D). From the fifth setiger onward, the blades of most of these setae become longer (two to five times as long as shown in Fig. 1D), until in the ninth or tenth setiger they are about as long as shown in Fig. 1E. In addition, one or two setae in the last setigers have very large blades of about 35μ length. In the 12th setiger the shafts of all setae apparently end only in one tip each, opposite the insertion of the blades. The blades are bifid, and at least some also have a spur below the tips (Fig. 1E). A dorsal simple seta is present from the first setiger, which in anterior segments is slightly bent at the tip (Fig. 1F). It is straight in median and posterior

segments (Fig. 1G). In all, there are about half a dozen setae per parapodium in the posterior region.

The name refers to the broad palps.

Diagnosis: A species of *Streptosyllis* Webster and Benedict with broad, anteriorly rounded palps, and heavy aciculae in setigers 2 to 5.

Differential Diagnosis: Six species of *Streptosyllis* are listed by Hartman (1959, 1965): *S. arenae* Webster and Benedict; *S. bidentata* Southern; *S. cryptopalpa* Hartmann-Schröder; *S. reducta* Hartmann-Schröder; *S. varians* Webster and Benedict; and *S. websteri* Southern. After inspecting the type of *S. varians*, Southern (1914) and Pettibone (1963) have pointed out that the animals described by Saint-Joseph (1895) under this name must be a different form; Southern observed the similarity with *S. websteri*.

The new species is similar to *S. arenae*, *S. cryptopalpa*, and *S. websteri*, including the form described by Saint-Joseph (1895) as *S. varians*, in that it has heavy aciculae in setigers 2 to 5. It is well distinguished from these species, apart from details of setation, by its broad, rounded palps visible from above. *S. varians* likewise has large palps which, however, are pointed anteriorly; also, it has heavy aciculae in about 20 setigers. There are no palps and heavy aciculae in *S. reducta*. The latter species, as well as *S. cryptopalpa*, has a tooth in the pharynx which is not reported for the species described earlier.

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